

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003516

A. CLASSIFICATION OF SUBJECT MATTER
Int. Cl.⁷ F16D41/08, 48/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int. Cl.⁷ F16D41/08, 48/00-48/12Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005
Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 11-159545 A (NTN Corp.), 15 June, 1999 (15.06.99), Claims; Fig. 5	1, 3, 5, 6 2, 4, 7-15
Y A	JP 1-158230 A (Nippondenso Co., Ltd.), 21 June, 1989 (21.06.89), Claims; Fig. 3	1, 3, 5, 6 2, 4, 7-15
A	JP 2003-285659 A (NTN Corp.), 07 October, 2003 (07.10.03), Claims	1-15
A	JP 11-157355 A (NTN Corp.), 15 June, 1999 (15.06.99), Full text; all drawings	1-15

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"&" document member of the same patent family

Date of the actual completion of the international search
06 May, 2005 (06.05.05)Date of mailing of the international search report
24 May, 2005 (24.05.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-311438 A (NTN Corp.), 09 November, 2001 (09.11.01), Full text; all drawings	1-15
A	JP 62-171530 A (Hitachi, Ltd.), 28 July, 1987 (28.07.87), Full text; all drawings	1-15
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 198688/1986 (Laid-open No. 104119/1988) (Isuzu Motors Ltd.), 06 July, 1988 (06.07.88), Full text; all drawings	1-15
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 74156/1986 (Laid-open No. 185926/1987) (Kaneko Agricultural Machinery Co., Ltd.), 26 November, 1987 (26.11.87), Full text; all drawings	1-15

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

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JP 11-159545 A	1999.06.15	US 6123183 A	2000.09.26
		DE 19854224 A1	1999.05.27
JP 1-158230 A	1989.06.21	(Family: none)	
JP 2003-285659 A	2003.10.07	(Family: none)	
JP 11-157355 A	1999.06.15	US 6035988 A	2000.03.14
JP 2001-311438 A	2001.11.09	(Family: none)	
JP 62-171530 A	1987.07.28	(Family: none)	
JP 63-104119 U	1988.07.06	(Family: none)	
JP 62-185926 U	1987.11.26	(Family: none)	